

01/08/2013

Bank: (Private Pilot)

## Airman Knowledge Test Question Bank

The FAA computer-assisted testing system is supported by a series of supplement publications. These publications, available through several aviation publishers, include the graphics, legends, and maps that are needed to successfully respond to certain test items. Use the following URL to download a complete list of associated supplement books: [http://www.faa.gov/training\\_testing/testing/airmen/test\\_questions/](http://www.faa.gov/training_testing/testing/airmen/test_questions/)

The Learning Statement Reference Guide for Airman Knowledge Testing contains listings of learning statements with their associated codes. It can be located at: [http://www.faa.gov/training\\_testing/testing/airmen/media/LearningStatementReferenceGuide.pdf](http://www.faa.gov/training_testing/testing/airmen/media/LearningStatementReferenceGuide.pdf)

---

1. PLT215 PVT  
In the Northern Hemisphere, the magnetic compass will normally indicate a turn toward the south when  
A) a left turn is entered from an east heading.  
B) a right turn is entered from a west heading.  
C) the aircraft is decelerated while on a west heading.

2. PLT401 PVT  
Under what conditions may objects be dropped from an aircraft?  
A) Only in an emergency.  
B) If precautions are taken to avoid injury or damage to persons or property on the surface.  
C) If prior permission is received from the Federal Aviation Administration.

3. PLT023 PVT  
Under which condition will pressure altitude be equal to true altitude?  
A) When the atmospheric pressure is 29.92 inches Hg.  
B) When standard atmospheric conditions exist.  
C) When indicated altitude is equal to the pressure altitude.

4. PLT125 PVT  
What is a hazard of rapid descents?  
A) Wind shear can cavitate one side of the envelope, forcing air out of the mouth.  
B) The pilot light cannot remain lit with the turbulent air over the basket.  
C) Aerodynamic forces may collapse the envelope.

5. PLT021 PVT  
(Refer to figure 44.) Calculate the weight and balance of the helicopter, and determine if the CG is within limits.

	WEIGHT MOMENT (LB)	ARM (IN)	(100)
Empty weight	1,495.0	101.4	
1,515.93			
Oil, 8 qt	---	100.5	---
Fuel, 40 gal	---	96.0	---
Pilot	160.0	64.0	---
A) CG 90.48 inches, out of limits forward.			

- B) CG 95.32 inches, within limits.
- C) CG 97.58 inches, within limits.

6. PLT158 PVT  
To check the gas pressures (pressure height) of an airship during a climb, the air damper valves should be  
A) opened forward and closed aft.  
B) opened aft and closed forward.  
C) closed.

7. PLT401 PVT  
When, if ever, may a recreational pilot act as pilot in command in an aircraft towing a banner?  
A) If the pilot has logged 100 hours of flight time in powered aircraft.  
B) If the pilot has an endorsement in his/her pilot logbook from an authorized flight instructor.  
C) It is not allowed.

8. PLT168 PVT  
The term 'angle of attack' is defined as the angle  
A) between the wing chord line and the relative wind.  
B) between the airplane's climb angle and the horizon.  
C) formed by the longitudinal axis of the airplane and the chord line of the wing.

9. PLT025 PVT  
Which statement relates to Bernoulli's principle?  
A) For every action there is an equal and opposite reaction.  
B) An additional upward force is generated as the lower surface of the wing deflects air downward.  
C) Air traveling faster over the curved upper surface of an airfoil causes lower pressure on the top surface.

10. PLT278 PVT  
(Refer to figure 36.) Determine the approximate manifold pressure setting with 2,450 RPM to achieve 65 percent maximum continuous power at 6,500 feet with a temperature of 36 °F higher than standard.  
A) 19.8 inches Hg.  
B) 20.8 inches Hg.  
C) 21.0 inches Hg.

11. PLT012 PVT  
(Refer to figure 36.) Approximately what true airspeed should a pilot expect with 65 percent maximum continuous power at 9,500 feet with a temperature of 36 °F below standard?  
A) 178 MPH.  
B) 181 MPH.  
C) 183 MPH.

12. PLT124 PVT  
(Refer to figure 8.) What is the effect of a temperature increase from 35 to 50 °F on the density altitude if the pressure altitude remains at 3,000 feet MSL?  
A) 1,000-foot increase.  
B) 1,100-foot decrease.  
C) 1,300-foot increase.

13. PLT008 PVT  
(Refer to figure 39.) Determine the approximate landing ground roll distance.

Pressure altitude 5,000 ft  
Headwind Calm  
Temperature 101 °F  
A) 445 feet.  
B) 545 feet.  
C) 495 feet.

14. PLT008 PVT  
(Refer to figure 39.) Determine the total distance required to land over a 50-foot obstacle.  
Pressure altitude 5,000 ft  
Headwind 8 kts  
Temperature 41 °F  
Runway Hard surface  
A) 837 feet.  
B) 956 feet.  
C) 1,076 feet.

15. PLT402 PVT  
When activated, an emergency locator transmitter (ELT) transmits on  
A) 118.0 and 118.8 MHz.  
B) 121.5 and 243.0 MHz.  
C) 123.0 and 119.0 MHz.

16. PLT497 PVT  
When making routine transponder code changes, pilots should avoid inadvertent selection of which code?  
A) 7200.  
B) 7400.  
C) 7600.

17. PLT497 PVT  
When making routine transponder code changes, pilots should avoid inadvertent selection of which code?  
A) 7200.  
B) 4000.  
C) 7500.

18. PLT473 PVT  
What is one purpose of wing flaps?  
A) To enable the pilot to make steeper approaches to a landing without increasing the airspeed.  
B) To relieve the pilot of maintaining continuous pressure on the controls.  
C) To decrease wing area to vary the lift.

19. PLT088 PVT  
(Refer to figure 4.) Which color identifies the normal flap operating range?  
A) The lower limit of the white arc to the upper limit of the green arc.  
B) The green arc.  
C) The white arc.

20. PLT088 PVT  
(Refer to figure 4.) Which marking identifies the never-exceed speed?  
A) Upper limit of the green arc.  
B) Upper limit of the white arc.  
C) The red radial line.

21. PLT132 PVT  
What does the red line on an airspeed indicator represent?  
A) Maneuvering speed.  
B) Turbulent or rough-air speed.  
C) Never-exceed speed.
22. PLT088 PVT  
(Refer to figure 4.) What is the full flap operating range for the airplane?  
A) 60 to 100 MPH.  
B) 60 to 208 MPH.  
C) 65 to 165 MPH.
23. PLT215 PVT  
Deviation error of the magnetic compass is caused by  
A) northerly turning error.  
B) certain metals and electrical systems within the aircraft.  
C) the difference in location of true north and magnetic north.
24. PLT435 PVT  
If a control tower and an FSS are located on the same airport, which function is provided by the FSS during those periods when the tower is closed?  
A) Automatic closing of the IFR flight plan.  
B) Approach control services.  
C) Airport Advisory Service.
25. PLT444 PVT  
Who has final authority to accept or decline any land and hold short (LAHSO) clearance?  
A) Pilot in command.  
B) Air Traffic Controller.  
C) Second in command.
26. PLT147 PVT  
A below glide slope indication from a pulsating approach slope indicator is a  
A) pulsating white light.  
B) steady white light.  
C) pulsating red light.
27. PLT147 PVT  
(Refer to figure 48.) While on final approach to a runway equipped with a standard 2-bar VASI, the lights appear as shown by illustration D. This means that the aircraft is  
A) above the glide slope.  
B) below the glide slope.  
C) on the glide slope.
28. PLT141 PVT  
(See Figure 65.) Which marking indicates a vehicle lane?  
A) A.  
B) C.  
C) E.
29. PLT077 PVT  
(Refer to figure 49.) That portion of the runway identified by the letter A may be used for  
A) landing.

- B) taxiing and takeoff.
- C) taxiing and landing.

30. PLT141 PVT

The 'yellow demarcation bar' marking indicates

- A) runway with a displaced threshold that precedes the runway.
- B) a hold line from a taxiway to a runway.
- C) the beginning of available runway for landing on the approach side.

31. PLT141 PVT

This sign is a visual clue that

- A) confirms the aircraft's location to be on taxiway "B."
- B) warns the pilot of approaching taxiway "B."
- C) indicates "B" holding area is ahead.

32. PLT141 PVT

This sign confirms your position on

- A) runway 22.
- B) routing to runway 22.
- C) taxiway 22.

33. PLT141 PVT

From the cockpit, this marking confirms the aircraft to be

- A) on a taxiway, about to enter runway zone.
- B) on a runway, about to clear.
- C) near an instrument approach clearance zone.

34. PLT161 PVT

The radius of the procedural Outer Area of Class C airspace is normally

- A) 10 NM.
- B) 20 NM.
- C) 30 NM.

35. PLT376 PVT

(Refer to figure 27, area 3.) When flying over Arrowwood National Wildlife Refuge, a pilot should fly no lower than

- A) 2,000 feet AGL.
- B) 2,500 feet AGL.
- C) 3,000 feet AGL.

36. PLT393 PVT

What action should a pilot take when operating under VFR in a Military Operations Area (MOA)?

- A) Obtain a clearance from the controlling agency prior to entering the MOA.
- B) Operate only on the airways that transverse the MOA.
- C) Exercise extreme caution when military activity is being conducted.

37. PLT119 PVT

The Aeronautical Information Manual (AIM) specifically encourages pilots to turn on their landing lights when operating below 10,000 feet, day or night, and especially when operating

- A) in Class B airspace.
- B) in conditions of reduced visibility.
- C) within 5 miles of a controlled airport.

38. PLT208 PVT

When executing an emergency approach to land in a single-engine airplane, it is important to maintain a constant glide speed because variations in glide speed

- A) increase the chances of shock cooling the engine.
- B) assure the proper descent angle is maintained until entering the flare.
- C) nullify all attempts at accuracy in judgment of gliding distance and landing spot.

39. PLT444 PVT

Pre-takeoff briefing of passengers for a flight is the responsibility of

- A) all passengers.
- B) the pilot.
- C) a crewmember.

40. PLT103 PVT

What is the antidote when a pilot has a hazardous attitude, such as 'Impulsivity'?

- A) Do it quickly to get it over with.
- B) It could happen to me.
- C) Not so fast, think first.

41. PLT011 PVT

A pilot and two passengers landed on a 2,100 foot east-west gravel strip with an elevation of 1,800 feet. The temperature is warmer than expected and after computing the density altitude it is determined the takeoff distance over a 50 foot obstacle is 1,980 feet. The airplane is 75 pounds under gross weight. What would be the best choice?

- A) Takeoff to the west because the headwind will give the extra climb-out time needed.
- B) Try a takeoff without the passengers to make sure the climb is adequate.
- C) Wait until the temperature decreases, and recalculate the takeoff performance.

42. PLT271 PVT

The destination airport has one runway, 08-26, and the wind is calm. The normal approach in calm wind is a left hand pattern to runway 08. There is no other traffic at the airport. A thunderstorm about 6 miles west is beginning its mature stage, and rain is starting to reach the ground. The pilot decides to

- A) fly the pattern to runway 08 since the storm is too far away to affect the wind at the airport.
- B) fly the normal pattern to runway 08 since the storm is west and moving north and any unexpected wind will be from the east or southeast toward the storm.
- C) fly an approach to runway 26 since any unexpected wind due to the storm will be westerly.

43. PLT332 PVT

A pilot experiencing the effects of hyperventilation should be able to restore the proper carbon dioxide level in the body by

- A) slowing the breathing rate, breathing into a paper bag, or talking aloud.
- B) breathing spontaneously and deeply or gaining mental control of the situation.
- C) increasing the breathing rate in order to increase lung ventilation.

44. PLT334 PVT

A lack of orientation with regard to the position, attitude, or movement of the aircraft in space is defined as

- A) spatial disorientation.
- B) hyperventilation.
- C) hypoxia.

45. PLT012 PVT

How far will an aircraft travel in 7.5 minutes with a ground speed of 114 knots?

- A) 14.25 NM.

- B) 15.00 NM.
- C) 14.50 NM.

46. PLT101 PVT  
(Refer to figure 26, area 5.) The navigation facility at Dallas-Ft. Worth International (DFW) is a  
A) VOR.  
B) VORTAC.  
C) VOR/DME.

47. PLT078 PVT  
(Refer to figure 53.) Where is Loup City Municipal located with relation to the city?  
A) Northeast approximately 3 miles.  
B) Northwest approximately 1 mile.  
C) East approximately 10 miles.

48. PLT064 PVT  
(Refer to figure 27, area 2.) The day VFR visibility and cloud clearance requirements to operate over the town of Cooperstown, after departing and climbing out of the Cooperstown Airport at or below 700 feet AGL are  
A) 1 mile and clear of clouds.  
B) 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from clouds.  
C) 3 miles and clear of clouds.

49. PLT455 PVT  
(Refer to figure 52.) What information should be entered in block 12 for a VFR day flight?  
A) The actual time enroute expressed in hours and minutes.  
B) The estimated time in enroute expressed in hours and minutes.  
C) The total amount of usable fuel onboard expressed in hours and minutes.

50. PLT078 PVT  
(Refer to figure 53.) What is the recommended communications procedure for landing at Lincoln Municipal during the hours when the tower is not in operation?  
A) Monitor airport traffic and announce your position and intentions on 118.5 MHz.  
B) Contact UNICOM on 122.95 MHz for traffic advisories.  
C) Monitor ATIS for airport conditions, then announce your position on 122.95 MHz.

51. PLT078 PVT  
(Refer to figure 53.) When approaching Lincoln Municipal from the west at noon for the purpose of landing, initial communications should be with  
A) Lincoln Approach Control on 124.0 MHz.  
B) Minneapolis Center on 128.75 MHz.  
C) Lincoln Tower on 118.5 MHz.

52. PLT362 PVT  
To use VHF/DF facilities for assistance in locating an aircraft's position, the aircraft must have a  
A) VHF transmitter and receiver.  
B) 4096-code transponder.  
C) VOR receiver and DME.

53. PLT300 PVT  
When the course deviation indicator (CDI) needle is centered during an omnireceiver check using a VOR test signal (VOT), the omnibearing selector (OBS) and the TO/FROM indicator should read  
A) 180° FROM, only if the pilot is due north of the VOT.

- B) 0° TO or 180° FROM, regardless of the pilot's position from the VOT.  
C) 0° FROM or 180° TO, regardless of the pilot's position from the VOT.

54. PLT064 PVT  
(Refer to figure 21, area 1.) The NALF Fentress (NFE) Airport is in what type of airspace?  
A) Class C.  
B) Class E.  
C) Class G.

55. PLT147 PVT  
Which approach and landing objective is assured when the pilot remains on the proper glidepath of the VASI?  
A) Continuation of course guidance after transition to VFR.  
B) Safe obstruction clearance in the approach area.  
C) Course guidance from the visual descent point to touchdown.

56. PLT371 PVT  
With respect to the certification of airmen, which is a category of aircraft?  
A) Gyroplane, helicopter, airship, free balloon.  
B) Airplane, rotorcraft, glider, lighter-than-air.  
C) Single-engine land and sea, multiengine land and sea.

57. PLT162 PVT  
The width of a Federal Airway from either side of the centerline is  
A) 4 nautical miles.  
B) 6 nautical miles.  
C) 8 nautical miles.

58. PLT372 PVT  
A 100-hour inspection was due at 3302.5 hours. The 100-hour inspection was actually done at 3309.5 hours. When is the next 100-hour inspection due?  
A) 3312.5 hours.  
B) 3395.5 hours.  
C) 3402.5 hours.

59. PLT369 PVT  
In which class of airspace is acrobatic flight prohibited?  
A) Class E airspace not designated for Federal Airways above 1,500 feet AGL.  
B) Class E airspace below 1,500 feet AGL.  
C) Class G airspace above 1,500 feet AGL.

60. PLT163 PVT  
During operations outside controlled airspace at altitudes of more than 1,200 feet AGL, but less than 10,000 feet MSL, the minimum flight visibility for VFR flight at night is  
A) 1 mile.  
B) 3 miles.  
C) 5 miles.

61. PLT163 PVT  
During operations outside controlled airspace at altitudes of more than 1,200 feet AGL, but less than 10,000 feet MSL, the minimum distance below clouds requirement for VFR flight at night is  
A) 500 feet.  
B) 1,000 feet.  
C) 1,500 feet.



62. PLT434 PVT  
Two-way radio communication must be established with the Air Traffic Control facility having jurisdiction over the area prior to entering which class airspace?  
A) Class C.  
B) Class E.  
C) Class G.
63. PLT141 PVT  
A flashing white light signal from the control tower to a taxiing aircraft is an indication to  
A) taxi at a faster speed.  
B) taxi only on taxiways and not cross runways.  
C) return to the starting point on the airport.
64. PLT366 PVT  
The operator of an aircraft that has been involved in an accident is required to file an NTSB accident report within how many days?  
A) 5.  
B) 7.  
C) 10.
65. PLT274 PVT  
To determine the freezing level and areas of probable icing aloft, the pilot should refer to the  
A) Inflight Aviation Weather Advisories.  
B) Weather Depiction Chart.  
C) Area Forecast.
66. PLT081 PVT  
(Refer to figure 16.) What sky condition and visibility are forecast for upper Michigan in the eastern portions after 2300Z?  
A) Ceiling 1,000 feet overcast and 3 to 5 statute miles visibility.  
B) Ceiling 1,000 feet overcast and 3 to 5 nautical miles visibility.  
C) Ceiling 100 feet overcast and 3 to 5 statute miles visibility.
67. PLT291 PVT  
The section of the Area Forecast entitled 'VFR CLDS/ WX' contains a general description of  
A) cloudiness and weather significant to flight operations broken down by states or other geographical areas.  
B) forecast sky cover, cloud tops, visibility, and obstructions to vision along specific routes.  
C) clouds and weather which cover an area greater than 3,000 square miles and is significant to VFR flight operations.
68. PLT081 PVT  
(Refer to figure 16.) What is the outlook for the southern half of Indiana after 0700Z?  
A) Scattered clouds at 3,000 feet AGL.  
B) Scattered clouds at 10,000 feet.  
C) VFR.
69. PLT514 PVT  
To best determine general forecast weather conditions over several states, the pilot should refer to  
A) Aviation Area Forecasts.  
B) Weather Depiction Charts.  
C) Satellite Maps.

70. PLT076 PVT  
(Refer to figure 17.) What wind is forecast for STL at 12,000 feet?  
A) 230° true at 56 knots.  
B) 230° true at 39 knots.  
C) 230° magnetic at 56 knots.

71. PLT081 PVT  
(Refer to figure 16.) What sky condition and type obstructions to vision are forecast for upper Michigan in the western portions from 0200Z until 0500Z?  
A) Ceiling becoming 1,000 feet overcast with visibility 3 to 5 statute miles in mist.  
B) Ceiling becoming 1,000 feet overcast with visibility 3 to 5 nautical miles in mist.  
C) Ceiling becoming 100 feet overcast with visibility 3 to 5 statute miles in mist.

72. PLT511 PVT  
The boundary between two different air masses is referred to as a  
A) frontolysis.  
B) frontogenesis.  
C) front.

73. PLT128 PVT  
Why is frost considered hazardous to flight?  
A) Frost changes the basic aerodynamic shape of the airfoils, thereby decreasing lift.  
B) Frost slows the airflow over the airfoils, thereby increasing control effectiveness.  
C) Frost spoils the smooth flow of air over the wings, thereby decreasing lifting capability.

74. PLT003 PVT  
(Refer to figure 35.) Determine the moment with the following data:

	WEIGHT (LB)	MOM/1000
Empty weight	1,350	51.5
Pilot and front passenger	340	---
Fuel (std tanks)	Capacity	---
Oil, 8 qt	---	---

A) 69.9 pound-inches.  
B) 74.9 pound-inches.  
C) 77.6 pound-inches.

75. PLT092 PVT  
(Refer to figure 35.) Determine the aircraft loaded moment and the aircraft category.

	WEIGHT (LB)	MOM/1000
Empty weight	1,350	51.5
Pilot and front passenger	380	---
Fuel, 48 gal	288	---
Oil, 8 qt	---	---

A) 78.2, normal category.  
B) 79.2, normal category.  
C) 80.4, utility category.

76. PLT021 PVT  
(Refer to figures 33 and 34.) What effect does a 35-gallon fuel burn (main tanks) have on the weight and balance if the airplane weighed 2,890 pounds and the MOM/100 was 2,452 at takeoff?  
A) Weight is reduced by 210 pounds and the CG is aft of limits.  
B) Weight is reduced by 210 pounds and the CG is unaffected.

C) Weight is reduced to 2,680 pounds and the CG moves forward.

77. PLT021 PVT  
(Refer to figures 33 and 34.) Which action can adjust the airplane's weight to maximum gross weight and the CG within limits for takeoff?

Front seat occupants	425 lb
Rear seat occupants	300 lb
Fuel, main tanks	44 gal

- A) Drain 12 gallons of fuel.
- B) Drain 9 gallons of fuel.
- C) Transfer 12 gallons of fuel from the main tanks to the auxiliary tanks.

78. PLT021 PVT  
(Refer to figures 33 and 34.) Upon landing, the front passenger (180 pounds) departs the airplane. A rear passenger (204 pounds) moves to the front passenger position. What effect does this have on the CG if the airplane weighed 2,690 pounds and the MOM/100 was 2,260 just prior to the passenger transfer?

- A) The CG moves forward approximately 3 inches.
- B) The weight changes, but the CG is not affected.
- C) The CG moves forward approximately 0.1 inch.

79. PLT021 PVT  
(Refer to figures 33 and 34.) With the airplane loaded as follows, what action can be taken to balance the airplane?

Front seat occupants	411 lb
Rear seat occupants	100 lb
Main wing tanks	44 gal

- A) Fill the auxiliary wing tanks.
- B) Add a 100-pound weight to the baggage compartment.
- C) Transfer 10 gallons of fuel from the main tanks to the auxiliary tanks.

80. PLT245 PVT  
A sailplane pilot can differentiate between a spin and a spiral dive because in a spiral dive,

- A) the speed remains constant.
- B) the G loads increase.
- C) there is a small loss of altitude in each rotation.

81. PLT088 PVT  
(Refer to figure 4.) What is the caution range of the airplane?

- A) 0 to 60 MPH.
- B) 100 to 165 MPH.
- C) 165 to 208 MPH.

82. PLT215 PVT  
In the Northern Hemisphere, if a glider is accelerated or decelerated, the magnetic compass will normally indicate

- A) a turn toward north while decelerating on an east heading.
- B) correctly only when on a north or south heading.
- C) a turn toward south while accelerating on a west heading.

83. PLT161 PVT  
If your glider is equipped with 4096 code radar beacon transponder, the code utilized for normal operations is

- A) 1201.

- B) 1200.
- C) 7700.

84. PLT221 PVT  
What would be a proper action or procedure to use if the pilot is getting too low on a cross-country flight in a sailplane?  
A) Continue on course until descending to 1,000 feet above the ground and then plan the landing approach.  
B) Fly directly into the wind and make a straight-in approach at the end of the glide.  
C) Have a suitable landing area selected upon reaching 2,000 feet AGL, and a specific field chosen upon reaching 1,500 feet AGL.

85. PLT219 PVT  
A pilot unintentionally enters a steep diving spiral to the left. What is the proper way to recover from this attitude without overstressing the glider?  
A) Apply up-elevator pressure to raise the nose.  
B) Apply more up-elevator pressure and then use right aileron pressure to control the overbanking tendency.  
C) Relax the back pressure and shallow the bank; then apply up-elevator pressure until the nose has been raised to the desired position.

86. PLT221 PVT  
The sailplane has become airborne and the towplane loses power before leaving the ground. The sailplane should release immediately,  
A) and maneuver to the right of the towplane.  
B) extend the spoilers, and land straight ahead.  
C) and maneuver to the left of the towplane.

87. PLT006 PVT  
A sailplane has a best glide ratio of 23:1. How many feet will the glider lose in 8 nautical miles?  
A) 1,840 feet.  
B) 2,100 feet.  
C) 2,750 feet.

88. PLT496 PVT  
The minimum allowable strength of a towline used for an aerotow of a glider having a certificated gross weight of 700 pounds is  
A) 560 pounds.  
B) 700 pounds.  
C) 1,000 pounds.

89. PLT496 PVT  
When using a towline having a breaking strength more than twice the maximum certificated operating weight of the glider, an approved safety link must be installed at what point(s)?  
A) Only the point where the towline is attached to the glider.  
B) The point where the towline is attached to the glider and the point of attachment of the towline to the towplane.  
C) Only the point where the towline is attached to the towplane.

90. PLT496 PVT  
For the aerotow of a glider that weighs 700 pounds, which towrope tensile strength would require the use of safety links at each end of the rope?  
A) 850 pounds.  
B) 1,040 pounds.

C) 1,450 pounds.

91. PLT514 PVT  
In addition to the standard briefing, what additional information should be asked of the weather briefer in order to evaluate soaring conditions?

- A) The upper soundings to determine the thermal index at all soaring levels.
- B) Dry adiabatic rate of cooling to determine the height of cloud bases.
- C) Moist adiabatic rate of cooling to determine the height of cloud tops.

92. PLT021 PVT  
(Refer to figure 54.) What is the CG of the glider if the pilot and passenger each weigh 215 pounds?

- A) 74.69 inches aft of datum - out of limits forward.
- B) 81.08 inches aft of datum - within limits.
- C) 81.08 inches aft of datum - over maximum gross weight.

93. PLT256 PVT  
(Refer to figure 54.) How is the CG affected if radio and oxygen equipment weighing 35 pounds is added at station 43.8? The glider weighs 945 pounds with a moment of 78,000.2 pound-inches prior to adding the equipment.

- A) CG shifts forward 0.79 inch - out of limits forward.
- B) CG shifts forward 1.38 inches - within limits.
- C) CG shifts aft 1.38 inches - out of limits aft.

94. PLT242 PVT  
The lift differential that exists between the advancing main rotor blade and the retreating main rotor blade is known as

- A) transverse flow effect.
- B) dissymmetry of lift.
- C) hunting tendency.

95. PLT268 PVT  
With calm wind conditions, which flight operation would require the most power?

- A) A right-hovering turn.
- B) A left-hovering turn.
- C) Hovering out of ground effect.

96. PLT204 PVT  
Select the UNICOM frequencies normally assigned to stations at landing areas used exclusively as heliports.

- A) 122.75 and 123.65 MHz.
- B) 123.0 and 122.95 MHz.
- C) 123.05 and 123.075 MHz.

97. PLT208 PVT  
What action is most appropriate when an envelope over-temperature condition occurs?

- A) Throw all unnecessary equipment overboard.
- B) Descend; hover in ground effect until the envelope cools.
- C) Land as soon as practical.

98. PLT208 PVT  
What action should the pilot take if engine failure occurs at altitude?

- A) Open the throttle as the collective pitch is raised.
- B) Reduce cyclic back stick pressure during turns.

C) Lower the collective pitch control, as necessary, to maintain rotor RPM.

99. PLT259 PVT

Ground resonance is most likely to develop when

- A) on the ground and harmonic vibrations develop between the main and tail rotors.
- B) a series of shocks causes the rotor system to become unbalanced.
- C) there is a combination of a decrease in the angle of attack on the advancing blade and an increase in the angle of attack on the retreating blade.

100. PLT264 PVT

If the pilot were to make a near-vertical power approach into a confined area with the airspeed near zero, what hazardous condition may develop?

- A) Ground resonance when ground contact is made.
- B) A settling-with-power condition.
- C) Blade stall vibration could develop.

101. PLT170 PVT

Which is appropriate for a helicopter approaching an airport for landing?

- A) Remain below the airplane traffic pattern altitude.
- B) Avoid the flow of fixed-wing traffic.
- C) Fly right-hand traffic.

102. PLT021 PVT

(Refer to figure 44.) Determine if the helicopter weight and balance is within limits.

	WEIGHT	ARM	MOMENT
	(LB)	(IN)	(100)
Empty weight	1,495.0	101.4	1,515.93
Oil, 8 qt	---	100.5	---
Fuel, 40 gal	---	96.0	---
Pilot and copilot	300.0	64.0	---

- A) CG 95.2 inches, within limits.
- B) CG 95.3 inches, weight and CG out of limits.
- C) CG 95.4 inches, within limits.